



ecology and environment, inc.

International Specialists in the Environment

33 North Dearborn Street
Chicago, Illinois 60602
Tel. 312/578-9243, Fax: 312/578-9345

US EPA RECORDS CENTER REGION 5



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M E M O R A N D U M

DATE: October 9, 2000

TO: Justin Bowerman, START Project Manager, E & E,
Cleveland, Ohio

FROM: David Hendren, START Analytical Services Manager,
E & E, Chicago, Illinois

THROUGH: Patrick Zwilling, START Assistant Program Manager,
E & E, Chicago, Illinois

SUBJECT: Organic Data Quality Review for Semivolatile Organic
Compounds (SVOCs), Sam Winer Motors Property, Summit
Township, Springfield County, Ohio

REFERENCE: Project TDD S05-0007-014 Analytical TDD S05-0007-808
Project PAN 0U1401SIXX Analytical PAN 0UAH01TAXX

The data quality assurance (QA) review of 11 water samples collected from the Sam Winer Motors Property site is complete. The samples were collected on September 12 and 13, 2000, by the Superfund Technical Assessment and Response Team (START) contractor, Ecology and Environment, Inc. (E & E). The samples were submitted to EIS Analytical Services, Inc., South Bend, Indiana. The laboratory analyses were performed according to the United States Environmental Protection Agency (U.S. EPA) Solid Waste 846 Method 8270.

Sample Identification

START Identification No.

Laboratory Identification No.

DW-EW-3531	71015
DW-EW-3626	71016
DW-EW-3640	71017
DW-EW-3539	71019
DW-EW-3488	71020
DW-EW-3417	71021
DW-EW-306	71022
DW Blank	71023
DW-BR-950	71024
DW-EW-3468 1508	71025
DW-EW-3553	71254

Data Qualifications:

I. Sample Holding Time: Acceptable

The samples were collected on September 12 and 13, 2000, extracted on September 18, 2000, and analyzed on September 20, 2000. This is within the 14-day holding time limit, from collection to extraction, and 40-day limit from extraction to analysis. (Sample DW-EW-3553 was broken in shipment. A replacement sample was collected on September 21, 2000, extracted on September 27, 2000, and analyzed on September 28, 2000.)

II. Gas Chromatography/Mass Spectrometry (GC/MS) Tuning: Acceptable

GC/MS tuning to meet ion abundance criteria using decafluorotriphenylphosphine (DFTPP) were acceptable and samples were analyzed within 12 hours of DFTPP tuning.

III. Calibrations:

• Initial Calibration: Acceptable

A five-point initial calibration was performed prior to analysis. All average response factors were greater than 0.05. The percent relative standard deviations (%RSDs) between response factors were less than 30% for all detected target compounds.

• Continuing Calibration: Acceptable

The percent differences of the response factors were less than 25%, as required for detected target compounds.

IV. Blank: Qualified

A method blank was analyzed with the samples. Three phthalate esters (di-n-butylphthalate, bis(2-ethylhexyl)phthalate, and butylbenzylphthalate) were found in the blank, and in the samples. Since all values for these compounds were less than ten times the concentrations in the blanks, all sample values have been qualified as undetected.

V. Internal Standards: Acceptable

The areas of the internal standards in the samples were within -50% to +100% of the associated calibration check standard. The retention times of the internal standards were within the 30-second control limit.

VI. Compound Identification: Acceptable

The mass spectra and retention times of the detected compounds matched those of the standards.

VII. Additional QC Checks: Acceptable

The recoveries of the surrogates used in the samples and blank were within laboratory-established guidelines.

VIII. Overall Assessment of Data for Use: Acceptable

The overall usefulness of the data is based on criteria for QA Level II as outlined in the Office of Solid Waste and Emergency Response (OSWER) Directive 9360.4-01 (April 1990), Data Validation Procedures, Section 4.0, BNAs By GC/MS analysis. Based upon the information provided, the data are acceptable for use, with the above-stated qualifications.

Data Qualifiers and Definitions:

U - The material was analyzed for, but not detected. The associated numerical value is the sample detection limit or adjusted sample detection limit.